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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,404	02/21/2002	Darren T. Castro	56206US002	1561

32692 7590 05/19/2003

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 05/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,404

Applicant(s)

CASTRO ET AL.

Examiner

Michael A Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☒ Claim(s) 34-42 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Claims 15-17 and 35-42 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 is indefinite as to the “aluminum oxide” and “yttrium oxide” components because claim 1 never defines that these components are present. These components should be defined as “further” components (i.e. **further** comprises aluminum oxide and yttrium oxide).

Claim 16 is indefinite as to the “aluminum oxide”, “yttrium oxide” and “non-stabilizing metal oxide” components because claim 1 never defines that these components are present. These components should be defined as “further” components (i.e. **further** comprises aluminum oxide, yttrium oxide and a second non-stabilizing metal oxide).

Claim 17 is indefinite because it depends on an indefinite claim.

Claims 35-40 are indefinite because they do not definitely define any method step of when these additional components are added. Are these additional oxides added to the abrasive particle precursor of claim 33 or are oxide precursors of these additional materials added to the abrasive particle precursor of claim 33? These claim should literally define an additional method step of adding these materials.

Claim 39 is also indefinite as to the “aluminum oxide” component because claim 37 never defines that this components is present. This components should be defined as “further” component.

Claim 40 also is indefinite as to the “aluminum oxide” and “non-stabilizing metal oxide” components because claim 37 never defines that these components are present. These components should be defined as “further” components.

Claims 41 and 42 are indefinite because they depend on an indefinite claim.

Claims 34-41 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

These claims do not further define the method but rather the abrasive. These claims should be amended to literally define an additional method step of adding these materials.

Claim 42 is objected to because it depends on an objected claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25, 27-30, 33-42 and 48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawanami et al.

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Kawanami et al. teach in the abstract, column 4, line 28-column 6, line 30 and the claims, a sintered zirconia abrasive particle (having a specified size) which comprises stabilized zirconia (claimed stabilizers), alumina, silica, and other components. The reference defines amount for the components which reads on the claimed amounts.

The reference teaches a sintered zirconia abrasive particle which comprises all of the claimed limitations, thus anticipating the instant claims. The reference teaches a size which reads on the claimed specified nominal grade. With respect to the plurality of particles, the reference teaches a method which employs a plurality of particles, thus reading on this limitation. Finally, the reference teaches a method which reads on the claimed method because during the reference method, at least one abrasive particle contacts the surface of a workpiece. In the alternative, no patentable distinction is seen too exist between the reference and the claimed invention in the absence of any evidence showing the contrary.

Claims 26, 31, 32 and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawanami et al. in view of Monroe et al. (671) and Johnson et al. (067).

Monroe et al. teach in column 4, lines 63-68 that abrasives grains are known to be used as abrasives in the manufacture of bonded abrasives, nonwoven abrasives and coated abrasives.

Johnson et al. teach in the abstract that abrasives grains are known to be used as abrasives in the manufacture of abrasive brushes.

It is the examiners position that one skilled in the art would have known that the abrasives according to the primary reference can be used to make bonded abrasive articles, nonwoven abrasive, coated abrasive and abrasive brushes because Monroe et al. and Johnson et

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al. teach that the use of abrasives in these articles is well known. In view of this, the manufacture of these abrasive articles from the abrasive particles defined by the primary reference are obvious to one skilled in the art. With respect to the use of an additional abrasive (instant claim 26), it is the examiners position that it is prima facie obvious to combine two or more abrasives to form a third abrasive material that is to be used for the same purpose (i.e. a combination of abrasives). In re Kerkhoven 205 USPQ 1069. This concept is clearly shown by Monroe et al. in column 4, lines 33-40.

Claims 1, 12-14, 25, 27-31, 33, 35-37, 42-43, 45 and 48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Amero.

Amero teaches in the entire document, a sintered zirconia abrasive granule (having a fine size) which comprises zirconia, alumina and silica. The reference defines amount for the components which reads on the claimed amounts.

The reference teaches a sintered zirconia abrasive particle which comprises all of the claimed limitations, thus anticipating the instant claims. The reference teaches a size which reads on the claimed specified nominal grade. With respect to the plurality of particles, the reference teaches using a plurality of granules to make abrasive articles, thus reading on this limitation. In the alternative, no patentable distinction is seen too exist between the reference and the claimed invention in the absence of any evidence showing the contrary.

Claims 18-24, 26, 32, 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amero in view of Monroe et al. (671) and Johnson et al. (067).

It is the examiners position that one skilled in the art would have known that the abrasives according to the primary reference can be used to make nonwoven abrasive, coated abrasive and abrasive brushes because Monroe et al. and Johnson et al. teach that the use of abrasives in these articles is well known. In view of this, the manufacture of these abrasive articles from the abrasive particles defined by the primary reference are obvious to one skilled in the art. With respect to the use of an additional abrasive (instant claim 26), it is the examiners position that it is prima facie obvious to combine two or more abrasives to form a third abrasive material that is to be used for the same purpose (i.e. a combination of abrasives). In re Kerkhoven 205 USPQ 1069. This concept is clearly shown by Monroe et al. in column 4, lines 33-40. With respect to the structure, size and density (instant claims 18-24), it is the examiners position that since the reference fails to mention any specific structure, size and density limitations, (criticality), this (the absence of any such limitation) constitutes a broad teaching of these limitations, as long as the final granule is obtained. In view of this, it can be reasonably interpreted that the claimed structure, size and density limitations are encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality).

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

The additional references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661

Michael Marcheschi

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~~4/03~~
5/03


MICHAEL MARCHESCHI
PAT. OFF. EXAMINER
